

67,200-1141
2003-0077

IN THE CLAIMS

Please cancel Claims 10-19

Please add new Claims 20-29.

67,200-1141
2003-0077

RECEIVED
CENTRAL FAX CENTER

JUN 20 2006

Listing of Claims

1. (original) A method of controlling the spatial distribution of RF power used to generate a plasma for processing a semiconductor device, comprising the steps of:

(a) producing RF power;

(b) delivering the RF power to each of a plurality of separate electrode zones; and

(c) separately controlling the power delivered to each of the electrode zones so as to produce a desired spatial distribution of RF power in the area of the semiconductor device.

2. (original) The method of Claim 1, wherein step (c) is performed by tuning each of a plurality of electrical circuits respectively associated with the zones.

3. (original) The method of Claim 2, wherein step (b) includes capacitively coupling the power generated in step (a) to each of the zones.

67,200-1141
2003-0077

4. (original) The method of Claim 3, wherein step (c) includes tuning each of the capacitors used to couple the power to the zones.

5. (original) The method of Claim 1, including the step of forming the electrode zones by providing a plurality of electrodes on a chuck for holding the semiconductor device during processing.

6. (original) The method of Claim 1, wherein step (a) is performed using a single source of RF power.

7. (original) The method of Claim 1, including sensing the spatial distribution of RF power in a chamber used to process the semiconductor device, and wherein the RF power delivered in step (b) is controlled based on the sensed distribution.

8. (original) The method of Claim 1, including electrically matching the RF power produced in step (a) with a network used to deliver the RF power in step (b).

67,200-1141
2003-0077

9. (original) The method of Claim 1, including arranging a plurality of electrodes on an chuck used to hold the semiconductor device, and capacitively coupling the electrodes to an RF power source.

Claims 10-19 (cancelled)

20. (new) The method of Claim 1, wherein said step (a) is carried out by an RF power generator.

21. (new) The method of Claim 3, wherein the step of capacitively coupling the electrode portions with the RF generator is carried out by a capacitor network.

22. (new) The method of Claim 21 further comprising the step of electrically matching the RF generator with the capacitor network.

67,200-1141
2003-0077

23. (new) The method of Claim 21 further comprising the step of capacitively coupling the electrode portions with the RF generator by a plurality of variable capacitors.

24. (new) The method of Claim 23 further comprising the step of tuning each of the capacitors by a controller in the connecting circuit.

25. (new) The method of Claim 5 further comprising the step of providing said electrode zone in concentric ring electrodes.

26. (new) The method of Claim 25 further comprising the step of coupling the respective variable capacitors with the ring electrodes to capacitively couple RF power from the generator to the ring electrodes.

27. (new) The method of Claim 25 further comprising the step of tuning the variable capacitors and controlling the amount of power coupled to each of the ring electrodes.

67,200-1141
2003-0077

28. (new) The method of Claim 24 further comprising the step of sensing information related to the spatial distribution of the plasma and delivering the sensed information to the controller by a sensor.

29. (new) The method of Claim 28 further comprising the step of changing the RF power delivered to at least certain of the electrode portions based on the information delivered to the controller by the sensor.